

4. (Twice Amended) A vector according to claim 1, wherein said heterologous DNA is operably associated with a promoter that is associated with said endogenous plant gene.

5. (Twice Amended) A vector according to claim 1, wherein said heterologous DNA is operably associated with the geminivirus coat protein promoter.

12. (Thrice Amended) A DNA construct comprising a geminivirus genome, wherein the DNA encoding the geminivirus coat protein has been replaced in part or in total with heterologous DNA comprising at least a fragment of an endogenous plant gene that occurs naturally in the plant genome.

38. (Twice Amended) A geminivirus silencing vector comprising a geminivirus genome which contains a heterologous DNA, said heterologous DNA comprising at least a fragment of a coding region of a gene endogenous to a plant, wherein the heterologous DNA sequence is inserted into the silencing vector in the antisense orientation, and wherein said geminivirus silencing vector silences expression of the endogenous plant gene upon introduction into a plant cell.

40. (Twice Amended) A DNA construct comprising a geminivirus genome, wherein the DNA encoding the geminivirus coat protein has been replaced in part or in total with heterologous DNA comprising at least a fragment of a coding region of a gene endogenous to a plant, and wherein the heterologous DNA sequence is inserted into the geminivirus genome in the antisense orientation.

42. (Twice Amended) A geminivirus silencing vector comprising a Tomato Golden Mosaic Virus (TGMV) genome which contains heterologous DNA, said heterologous DNA comprising at least a fragment of a gene endogenous to a plant, wherein said geminivirus silencing vector silences expression of the endogenous plant gene upon introduction into a plant cell.

C7 44. (Twice Amended) A geminivirus silencing vector comprising an African Cassava Mosaic Virus (ACMV) genome which contains heterologous DNA, said heterologous DNA comprising at least a fragment of a gene endogenous to a plant, and wherein said geminivirus silencing vector silences expression of the endogenous plant gene upon introduction into a plant cell.

C8 46. (Twice Amended) A DNA construct comprising a Tomato Golden Mosaic Virus (TGMV) genome, wherein the DNA encoding the TGMV coat protein has been replaced in part or in total with heterologous DNA comprising at least a fragment of an endogenous plant gene.

C9 48. (Twice Amended) A DNA construct comprising an African Cassava Mosaic Virus (ACMV) genome, wherein the DNA encoding the ACMV coat protein has been replaced in part or in total with heterologous DNA comprising at least a fragment of an endogenous plant gene.

C10 50. (Twice Amended) A method of silencing the expression of an endogenous plant gene in a plant cell, comprising inoculating said plant cell with a geminivirus silencing vector comprising a geminivirus genome which contains heterologous DNA, said heterologous DNA comprising at least a fragment of a gene endogenous to a plant.

C11 52. (Twice Amended) A method of silencing the expression of an endogenous plant gene in a plant cell, comprising inoculating said plant cell with a DNA construct comprising a geminivirus genome, wherein the DNA encoding the geminivirus coat protein has been replaced in part or in total with heterologous DNA comprising at least a fragment of an endogenous plant gene.

C12 54. (Twice Amended) A method of systemically silencing expression of an endogenous plant gene in a plant, comprising inoculating said plant with a

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geminivirus silencing vector comprising a geminivirus genome which contains heterologous DNA, said heterologous DNA comprising at least a fragment of a gene endogenous to a plant.

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56. (Twice Amended) A method of systemically silencing expression of an endogenous plant gene in a plant, comprising inoculating said plant with a DNA construct comprising a geminivirus genome, wherein the DNA encoding the geminivirus coat protein has been replaced in part or in total with heterologous DNA comprising at least a fragment of an endogenous plant gene

C14
62. (Amended) A geminivirus silencing vector comprising a Tomato Golden Mosaic Virus (TGMV) genome comprising:
the TGMV AL1, AL2 and AL3 coding sequences operably associated with an AL1 promoter,
heterologous DNA, said heterologous DNA operably associated with a TGMV coat protein promoter and comprising at least a fragment of a gene endogenous to a plant that occurs naturally in the plant genome,
wherein said heterologous DNA and said AL1, AL2 and AL3 coding sequences are bidirectionally transcribed from said geminivirus silencing vector, and
wherein said geminivirus silencing vector silences expression of the endogenous plant gene upon introduction into a plant cell.

C15
64. (Amended) A method of silencing the expression of an endogenous plant gene in a plant cell, comprising:
introducing a nucleic acid sequence encoding the geminivirus movement proteins into said plant cell;
inoculating said plant cell with a geminivirus silencing vector comprising a geminivirus genome which contains heterologous DNA comprising at least a fragment of a gene endogenous to a plant.

Please cancel claims 3, 8, 9, 18, 19, 36, 37, 60 and 61 without prejudice.